

## CONFIDENTIAL



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUN 1 0 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

## **MEMORANDUM**

SUBJECT: Data Call In for Products Containing Mancozeb

Mancozeb Registration Standard

ID NO(S). 352-341, 398, 343, 449 RCB NO(S). 3044, 3405, 3406, 3407 MRID NO(S). 405175-00, 01, and 02

FROM:

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R. E. Gonovni

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Hazard Evaluation Division (TS-769C)

TO:

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THRU:

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Residue Chemistry Branch

Hazard Evaluation Division (TS-769C)

In response to the data call in for products containing mancozeb as the active ingredient, E. I. du Pont de Nemours & Company (Inc.) has submitted reports on the product chemistry, on the unregistered technical chemical and a method for determination of the active ingredient in the mancozeb products. The information/data provided and our conclusions are discussed below. In addition, Table A is included to reflect the remaining product chemistry data requirements.

61-1 product Identity and Disclosure of Ingredients No additional information is required on this topic.

61-2 Description of Beginning Materials and Manufacturing Process

The information provided appears in Confidential Appendix A.

No additional information is required to satisfy the data requirements for this topic.

- 61-3 Discussion of Formation of Impurities
  The registrant has provided a discussion on the formation of impurities, no additional information is needed.
- 62-3 Analytical Methods to Verify Certified Limits
  The information/data provided appears in Appendix B.

Methodology suitable for distinguishing mancozeb from other potential carbon disulfide producing contaminants must be provided. The method(s) must be accompanied by validation studies indicating accuracy and precision.

63-Series Physical and Chemical properties
The physical and chemical properties for mancozeb as reported by
the manufacturer are as follows.

- 63-2 Color: Yellow
- 63-3 physical State: Powder
- 63-4 Odor: Slight sulfur
- 63-7 density: 33.8
- 63-8 Solubility: Product exists as an insoluble polymer.
- 63-9 Vapor Pressure: N/A
- 63-10- Dissociation Constant: Dissolving the product in water results in its destruction.
- 63-11- Octanol/Water Partition Coefficient: N/A, due to explanations provided for 63-8 and 63-10.
- 63-12- pH: 7.6 (10% slurry).
- 63-13- Stability: A loss of 0.5% activity/month at 28-31 degrees C, test period = 24 months.

## ATTACHMENTS:

Attachment I - Table A (2 pages)

cc: Mancozeb Registration Standard File, SF, Reviewer
(H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
PM 21 (L. Rossi)

Attachment II - Confidential Appendix A (1 page) Attachment III - Confidential Appendix B (2 pages)

- cc: Mancozeb Registration Standard File, SF, Reviewer
   (H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
   PM 21 (L. Rossi).
- cc: Mancozeb Registration Standard File, SF, RF, Reviewer
   (H. Fonouni), RBP, TOX (R. Coberly), PMSD/ISB (E. Eldredge),
   PM 21 (L. Rossi), Circu.

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TABLE A
GENERIC DATA REQUIREMENTS FOR THE UNREGISTERED TECHNICAL MANCOZEB, E. I. DU PONT DE NEMOURS & COMPANY, INC.

A CFR 158.120 Product Chemistry Product Identity and Composition 61-1 - Identity and Composition 61-1 - Identity of Ingredients 61-2 - Waterials and Process 61-3 - Formation of Impurities 61-3 - Formation of Impurities 61-3 - Formation of Impurities 62-1 - Preliminary Analysis 62-1 - Preliminary Analysis 62-2 - Certification of Ingredient 62-2 - Certification of Ingredient 62-3 - Analytical Methods to Verify Certified Limits 63-2 - Color 63-3 - Physical and Chemical Characteristics 63-4 - Odor 63-5 - Melting Point 63-6 - Boiling Point 63-6 - Boiling Point 63-7 - Bulk Density 63-9 - Vapor Pressure 63-10 - Dissociation Constant 63-10 - Dissociation Constant 63-11 - Octanol/Water Partition 63-12 - FH  TGAI  R  R  RAI  R  RAI  R  R  R  RAI  R  R  R  R  R  R  R  R  R  R  R  R  R	Guideline Citation and Name of Test	Test Substance	Guidelines Status	Are Additional Data Required? [Yes] [No]	Reference Citation (MIRD No.)
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(Continued, footnotes follow)

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GENERIC DATA REQUIREMENTS FOR THE UNREGISTERED TECHNICAL MANCOZEB, E. I. DU PONT DE NEMOURS & COMPANY, INC. TABLE A

Other Requirements 64-1 - Submittal of Samples	158.120 Product Chemistry (Cont'd) Physical and Chemical Characteristics 63-13- Stability	Guideline Citation and Name of Test
TGAI and PAI	TCAI	Test Substance
PAI CR3	æ	Guidelines Status
×	×	Are Additional Data Required? [Yes] [No]
	405175-02	Reference Citation (MIRD No.)

CR = Conditionally Required; N/A = Not Applicable. TGAI = Technical Grade Active Ingredient (Technical Chemical); PAI = Purified Active Ingredient; R = Required;

2/ Not applicable, since the product is a solid at room temperature. active ingredient must distinguish mancozeb from other potential carbon disulfide producing contaminants 1/A complete description of each analytical method used to analyze the active ingredient and each impurity present at a level  $\ge 0.1\%$  (w/w) of the product must be provided. The methods used for the analysis of the

3/ If samples are needed, the Agency will request them.

Mancozeb residue chemistry review		
Page is not included in this copy.		
Pages $5$ through $7$ are not included in this copy.		
The material not included contains the following type of information:		
Identity of product inert ingredients		
Identity of product impurities ,		
$\chi$ Description of the product manufacturing process		
$\underline{\chi}$ Description of product quality control procedures		
Identity of the source of product ingredients		
Sales or other commercial/financial information		
A draft product label		
The product confidential statement of formula		
Information about a pending registration action		
FIFRA registration data		
The document is a duplicate of page(s)		
The document is not responsive to the request		
The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.		

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